

**A Method and a System for Solid Freeform Fabrication of a
Three-Dimensional Object**

ABSTRACT

A method for creating a three-dimensional solid freeform fabrication object with phase-change material includes depositing a bulk amount of phase-change material in a defined region, selectively ink-jetting an ultraviolet initiator onto a predetermined area of the phase-change material, wherein the ultraviolet initiator defines a cross-sectional area of the three-dimensional object, and exposing the ultraviolet initiator to an ultraviolet light to cause cross-linking of the defined region.